

HU:MGSDVRDLNALLPAVPSLGGGGGCGALPVSGAAQWAPVLDFAPPGASAYGSL
MO:MGSDVRDLNALLPAVSSLGGGGGCGLPVSGAAQWAPVLDFAPPGASAYGSL

HU:GGPAPPPAPPPPPPPPPHSPFIKQEPSWGGAEPHEEQCLSAFTVHFSGQFTGTAG
MO:GGPAPPPAPPPPPPPPPHSPFIKQEPSWGGAEPHEEQCLSAFTLHFSGQFTGTAG

HU:ACRYGPF GPPPPSQASSGQARMFPNAPYLPSCLESQPAIRNQGYSTVTFDGTPS
MO:ACRYGPF GPPPPSQASSGQARMFPNAPYLPSCLESQPTIRNQGYSTVTFDGAPS

HU:YGHTPSHHAAQFPNHSFKCEDPMGQQGSLGEQQYSVPPPVYGCHTPTDSCGTG
MO:YGHTPSHHAAQFPNHSFKCEDPMGQQGSLGEQQYSVPPPVYGCHTPTDSCGTG

HU:SQALLLRTPYSSDNLQYQMTSQLECMTNQMNLGATLKGVAAGSSSSSVKWTE
MO:SQALLLRTPYSSDNLQYQMTSQLECMTNQMNLGATLKGMAAGSSSSSVKWTE

HU:GQSNHSTGYESDNHTTPELPGAQYRIHTHGVRGIQDVRRVPGVAPTLVRSAS
MO:GQSNHGIGYESDNHTAPELPGAQYRIHTHGVRGIQDVRRVSGVAPTLVRSAS

HU:ETSEKRPFMCAYPGCNRYFKLSHLQMHSRKHTGEKPYQCDFKDCERRFSR
MO:ETSEKRPFMCAYPGCNRYFKLSHLQMHSRKHTGEKPYQCDFKDCERRFSR

HU:SDQLKRHQRRHTGVKPFQCKTCQRKFSRSDHLKTHTRTHTGKTSEKPFSCR
MO:SDQLKRHQRRHTGVKPFQCKTCQRKFSRSDHLKTHTRTHTGKTSEKPFSCR

HU:WPSCQKKFARSDELVR~~EN~~NMHQRNMTKLQAL
MO:WHSCQKKFARSDELVR~~EN~~NMHQRNMTKLHVAL

FIG. 1

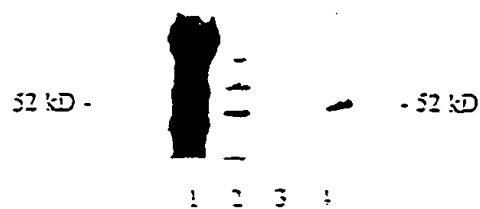


FIG. 2

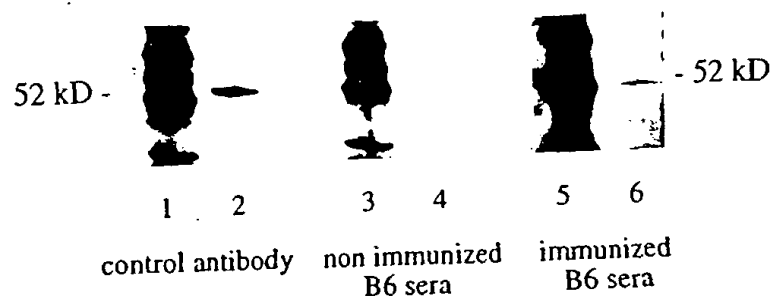


FIG. 3

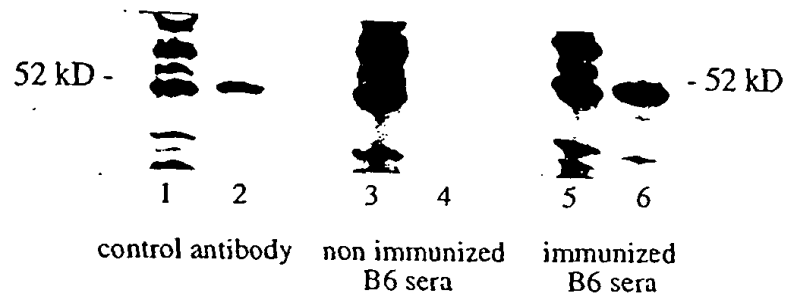


FIG. 4

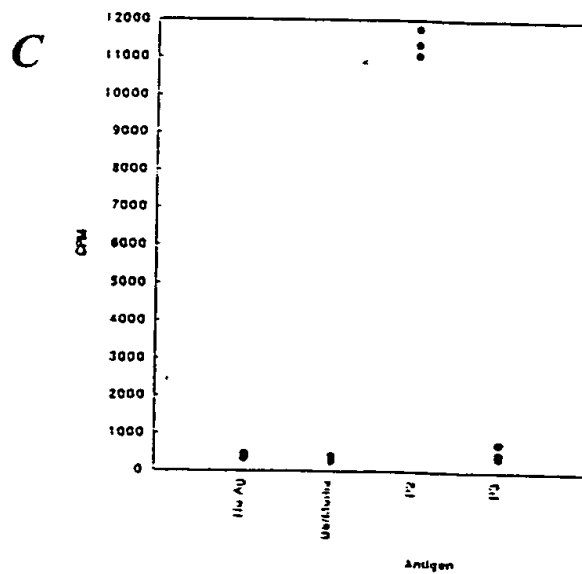
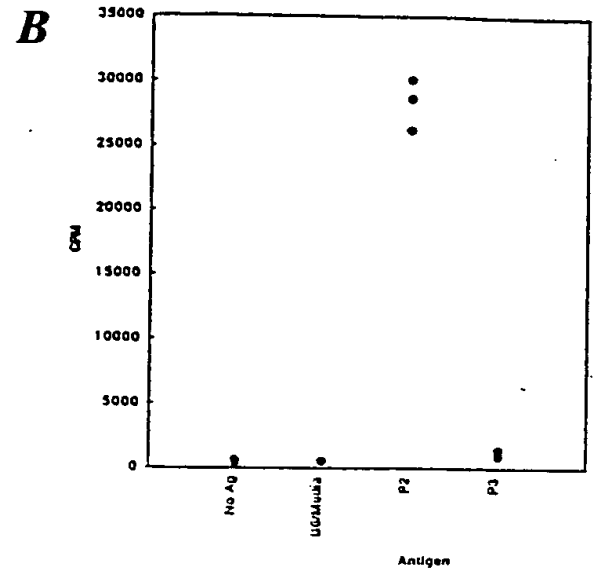
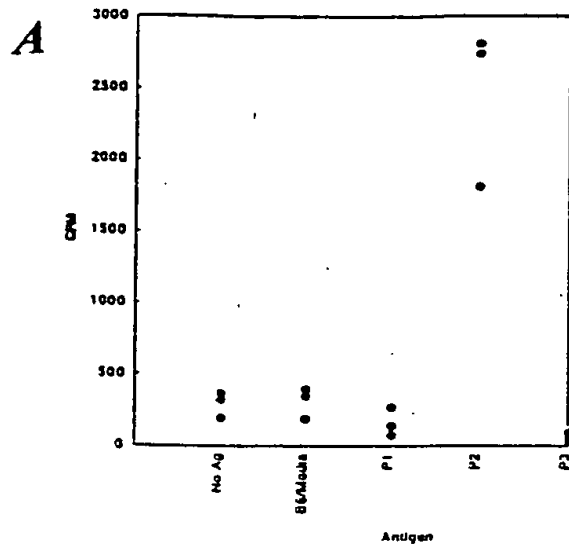


FIG. 5A-5C

A Vaccine A stimulated line **B** Vaccine B stimulated line

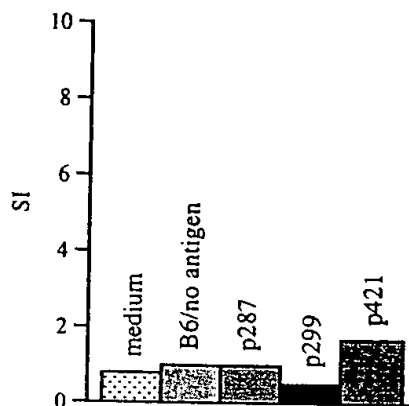
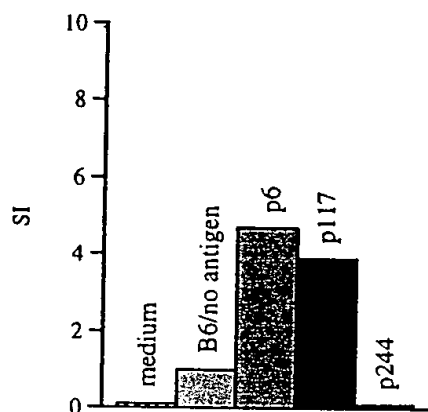


FIG. 6A and 6B

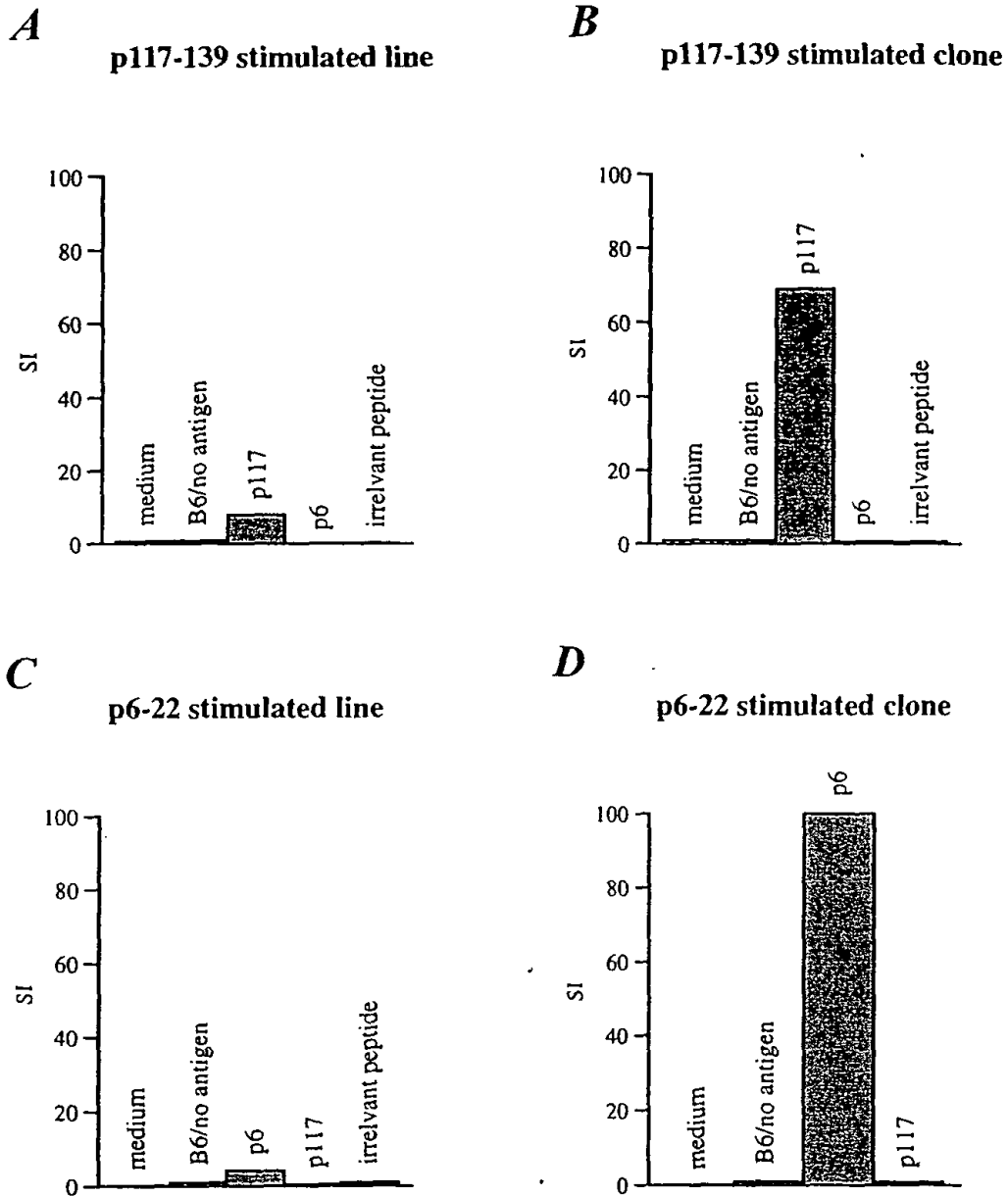


FIG. 7A-7D

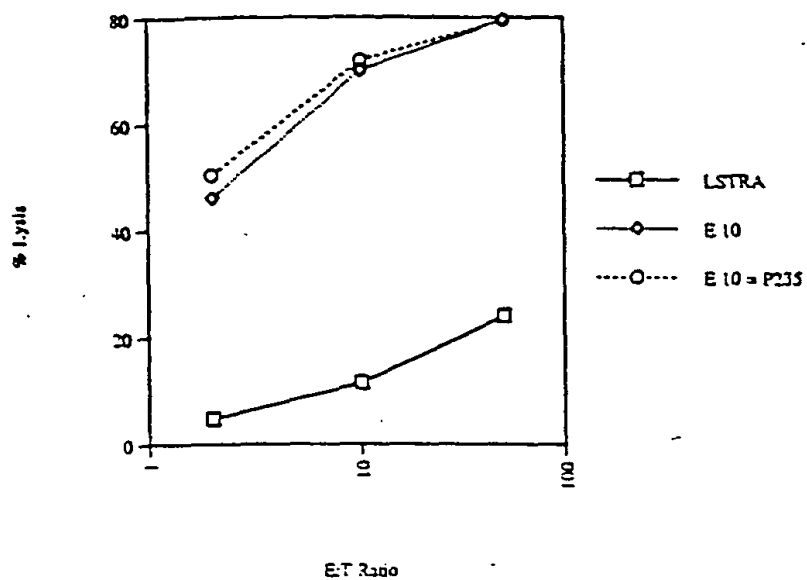
5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
MGSDVRLNALLPAVPSLGGGGGCLPVSGAAQWAPVLDFAFPGASAYGSLGGPAPPAPPPPPPPPHSFIKQE
.....AAAAAAAAAAAAAAAA.....AAAAA.....AAAAAAAAA.....
.....RRRR.....
.....
.....
80 85 90 95 100 105 110 115 120 125 130 135 140 145 150
PSWGGAEPEEQCLSAFTVHFSGQFTGTAGACRYGPFSGPPPSQASSGQARMFPNAPYLPSCLESQPAIRNQYS
.....AAA.....AAAA.....AAA.....AAAAA.....
.....RRRR.....RRRR.....
.....DDDDDDDD.....
.....
155 160 165 170 175 180 185 190 195 200 205 210 215 220 225
TVTFDGTSPSYGHTPSHHAQFPNHSFKHEDPMGQCGSLGEQQYSVPPPVYGCHTPTDSTGSQALLLRTPYSSDN
.....AAAAA.....AAAAA.....AA
.....RRRR.....
.....DDDDDDDDDDDDDDDD.....
.....
230 235 240 245 250 255 260 265 270 275 280 285 290 295 300
LYQMTSQLECMTNQMNLGATLKGVAAGSSSSSVKWTGQSNHSTGYESDNHTTPILCGAQYRIHGHGVFRGIQDV
AAAAAAAA.....AAA.AAA.....AAAAAAAAA
.....RRRRRRRRRR.....RRRR.....RRRR.....
DDDDDD.....DDDDDDDDDD.....
.....ddddd.....
305 310 315 320 325 330 335 340 345 350 355 360 365 370 375
RRVPGVAPTLVRSASETSEKRPFMCAYPGCNKRYFKLSHLQMHSRKHTGEKPYQCDFKDCERREFSRSDQLKRHR
AAAAA.AAAAAAAAAA.....AAAA.AAAAAAAAAA
.....RRRR.....RRRR.....
.....DDDDDD.....
.....
380 385 390 395 400 405 410 415 420 425 430 435 440 445 450
RHTGVKPFQCKTCQRKFSRSDHLKTHTRHTGKTSEKPFSCRWPSCQKKFARSDLVRRHHNMHQRNMTKLQLAL
.....AAAA.AAAA.AA.....AAAA.....AAA.....AAAAA.....AAA.....
.....RRRR.....RRRR.....
.....
.....dddddddddd.....

FIG. 8A

5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
MGSDVRDLNALLPAVSSLGCGGGLPVSGAAQWAPVLDFAFPGASAYGSLGGPAPPPAPPPPPPPHSHFIKQE
.....AAAAAAAAAAAAAAAA.....AAAAA.....AAAAAAAAAAAA.....
.....RRRR.....
.....
.....
80 85 90 95 100 105 110 115 120 125 130 135 140 145 150
PSWGGAEPEHEQCLSAFTLHFSGQFTGTAGACRYG?FG?PPPSQASSGQARME?NAPYLPSCLESQPTIRNQGY
.....AAAA.....AAA.....AAAAA.....
.....RRRR.....RRRR.....
.....DDDDDDDD.....
.....
155 160 165 170 175 180 185 190 195 200 205 210 215 220 225
TVTFDGAPSYGHTPSHHAAQFPNHSEKHEDPMGQCGSLGEQQYSVPPPVYGCHTPTDSC?GSGALLRTPYSSDN
.....AAAA.....AAAAA.....AA
.....RRRR.....
.....DDDDDDDDDDDDDD.....
.....
230 235 240 245 250 255 260 265 270 275 280 285 290 295 300
LYQMTSQLECM?WNQMNLGATLKGMAGSSSSV?WTEGQSNHGIGYESDNHTAPILCGAQYRIHTHG?VFRGIQDV
AAAAAAAA.....AAA.AAA.....AAAAAAAAA
.....RRRRRRRRRR.....RRRR.....RRRR.....
DDDDDD.....DDDDDDDDDDDD.....
.....dddd.....
305 310 315 320 325 330 335 340 345 350 355 360 365 370 375
RRVSGVAPT?LVRSA?SETSEKRP?MCA?PGCNKRYFXLSLQMSRKHTGEKPYQCDFKDCERRFSRSDQLKRHR
AAAAA.AAAAAAAAAA.....?.....AAAA.AAAAAAAAAA.
.....RRRR.....RRRR.....
.....DDDDDDDDDDDD.....
.....
380 385 390 395 400 405 410 415 420 425 430 435 440 445 450
RHTGVKPFQCKTCQRKFSRSDHLKTH?RTH?TGK?SEK?FSCRWHSQCXK?FARSDELVRH?NMHQRNM?TKLHVAL
.....AAAA.AAAA.AA.....AAAA.....AA.....AAAAA.....AAAA.....
.....RRRR.RRRR.....
.....
.....dddddccccdd

FIG. 8B

A



B

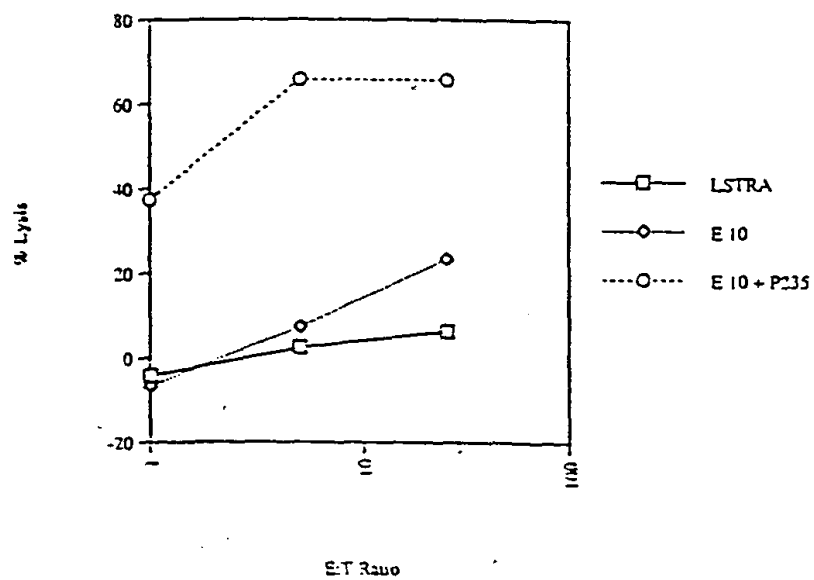


FIG. 9A and 9B

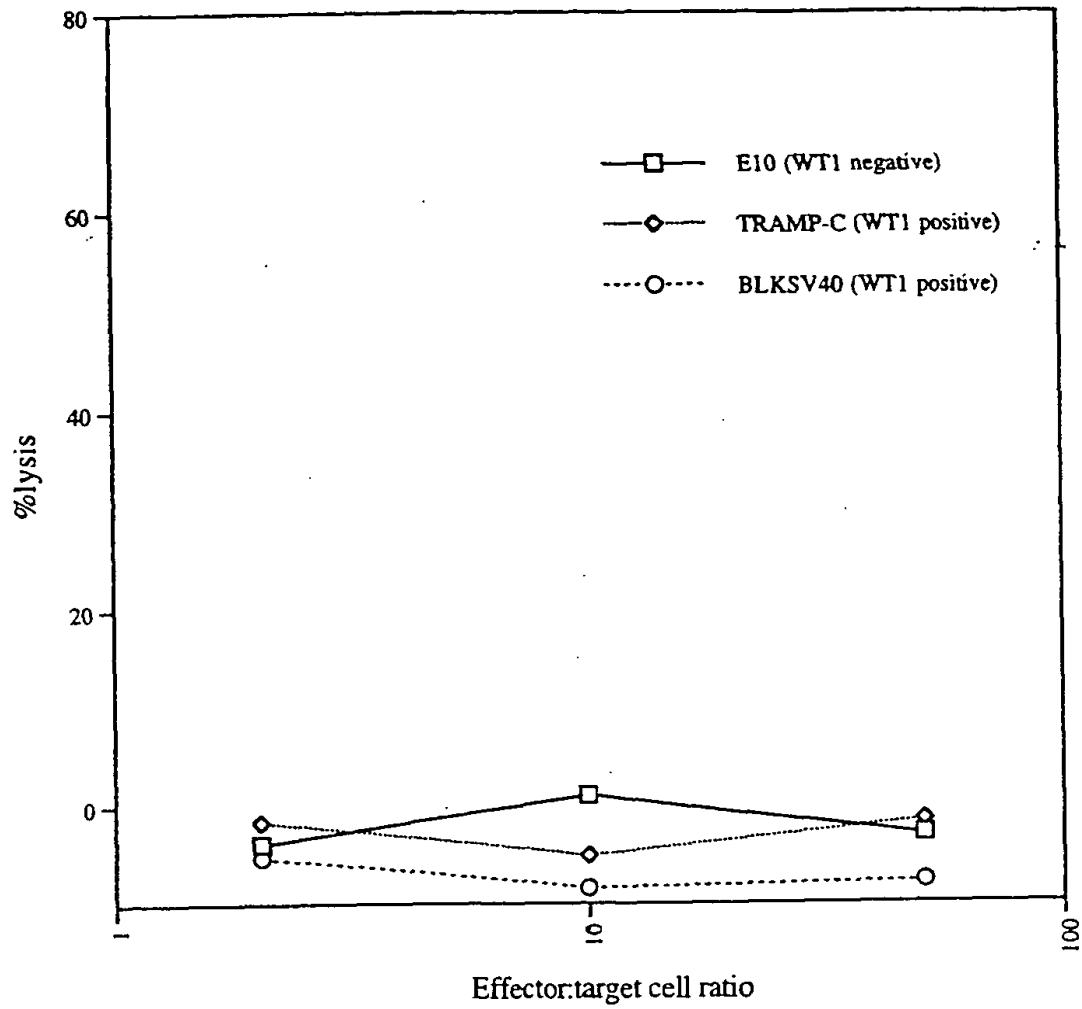


FIG. 10A

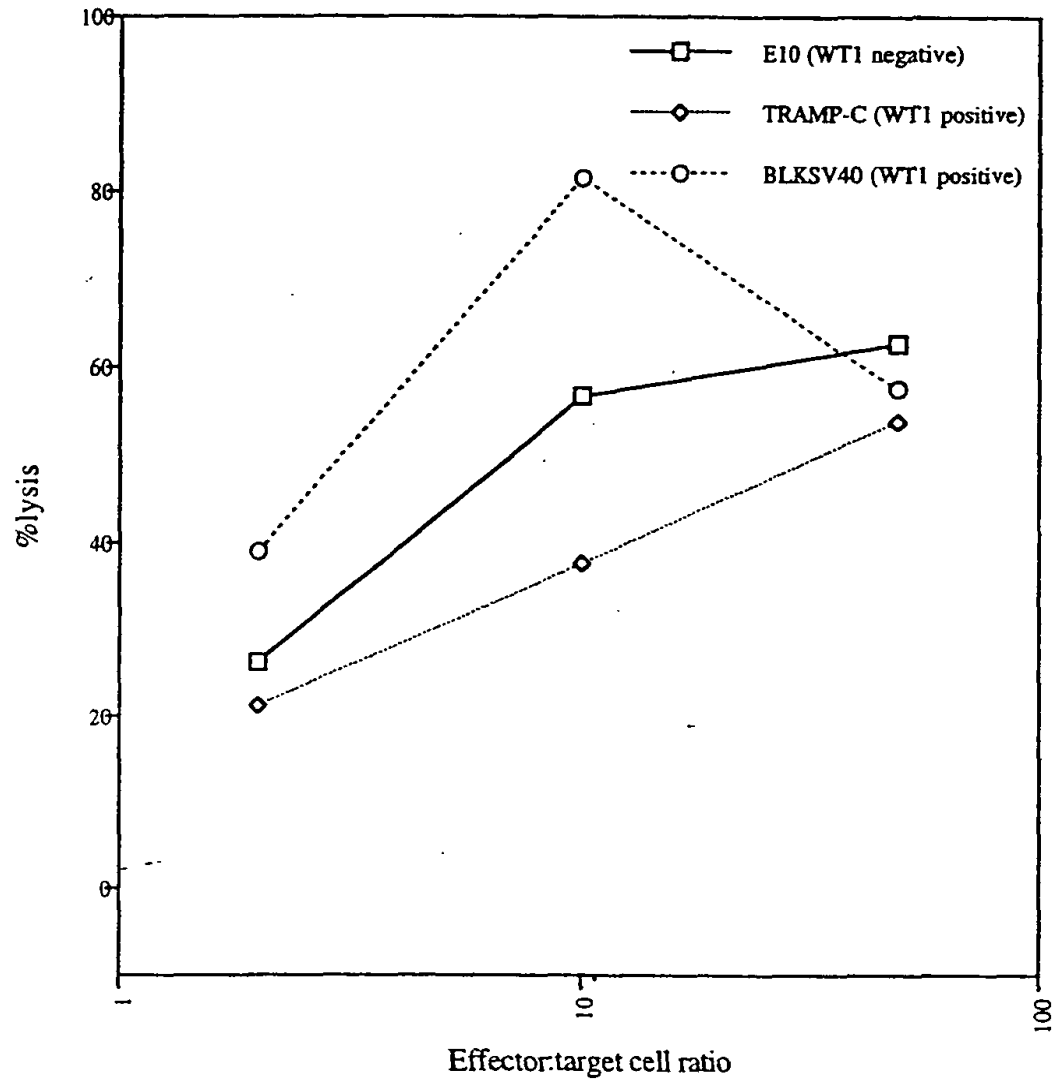


FIG. 10B

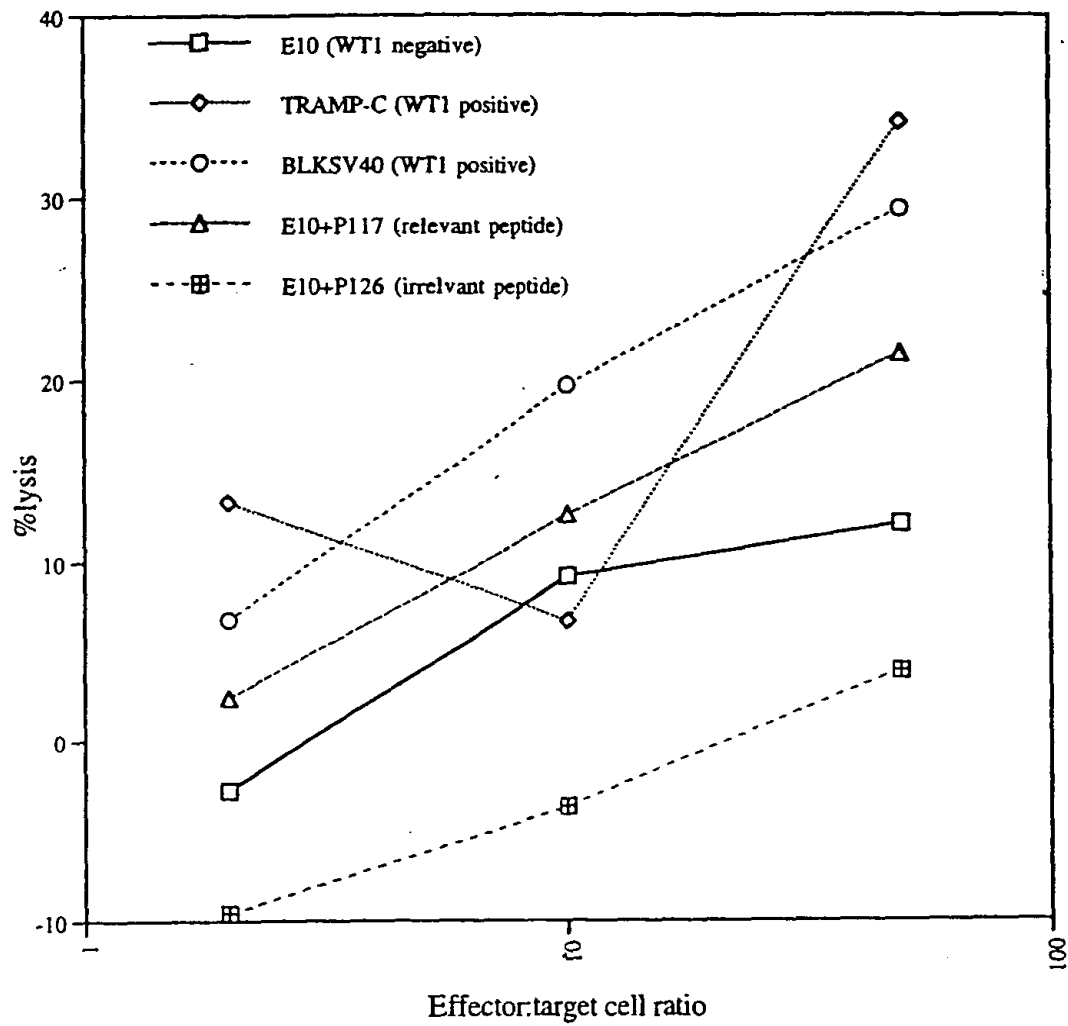


FIG. 10C

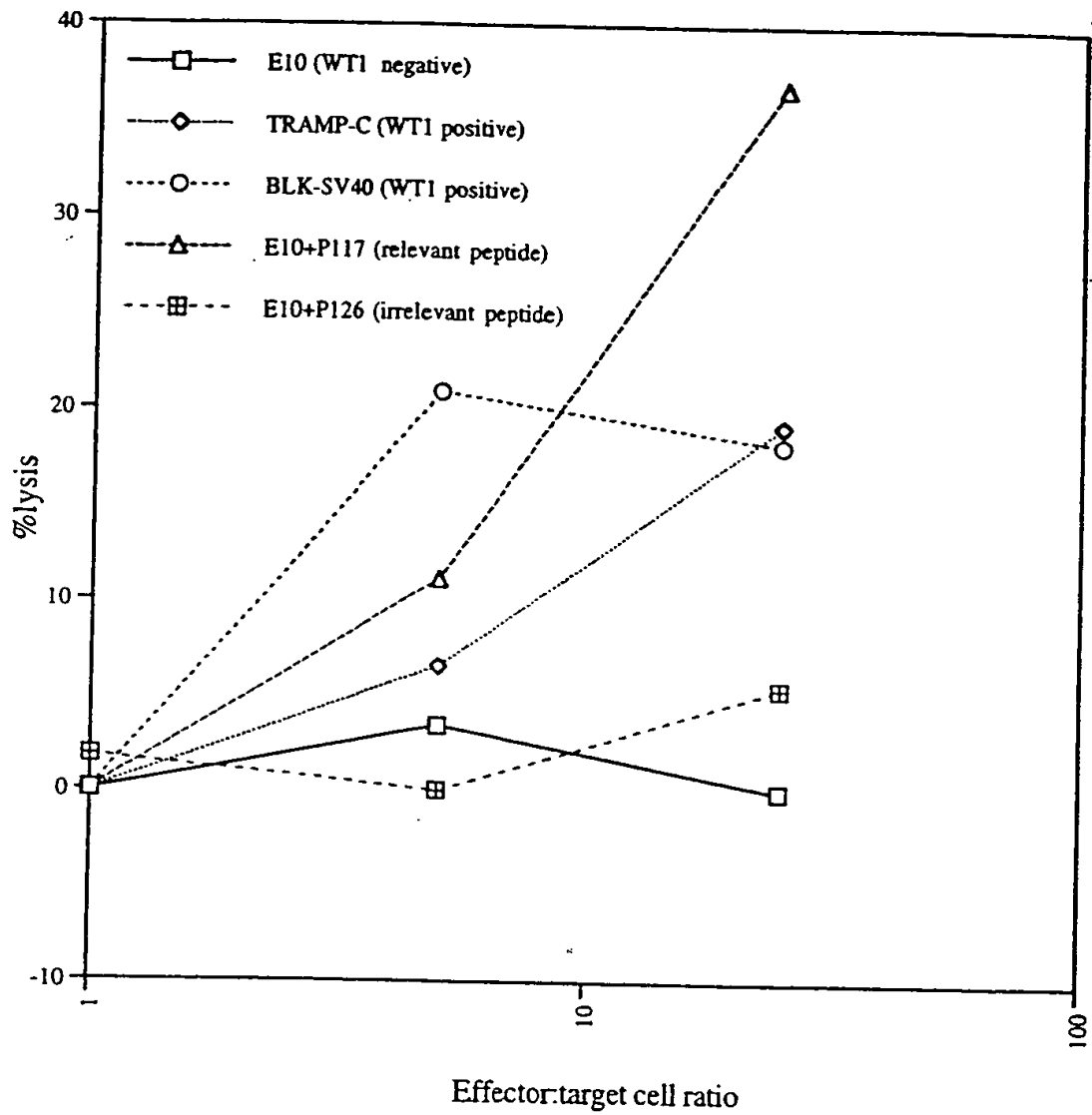


FIG. 10D

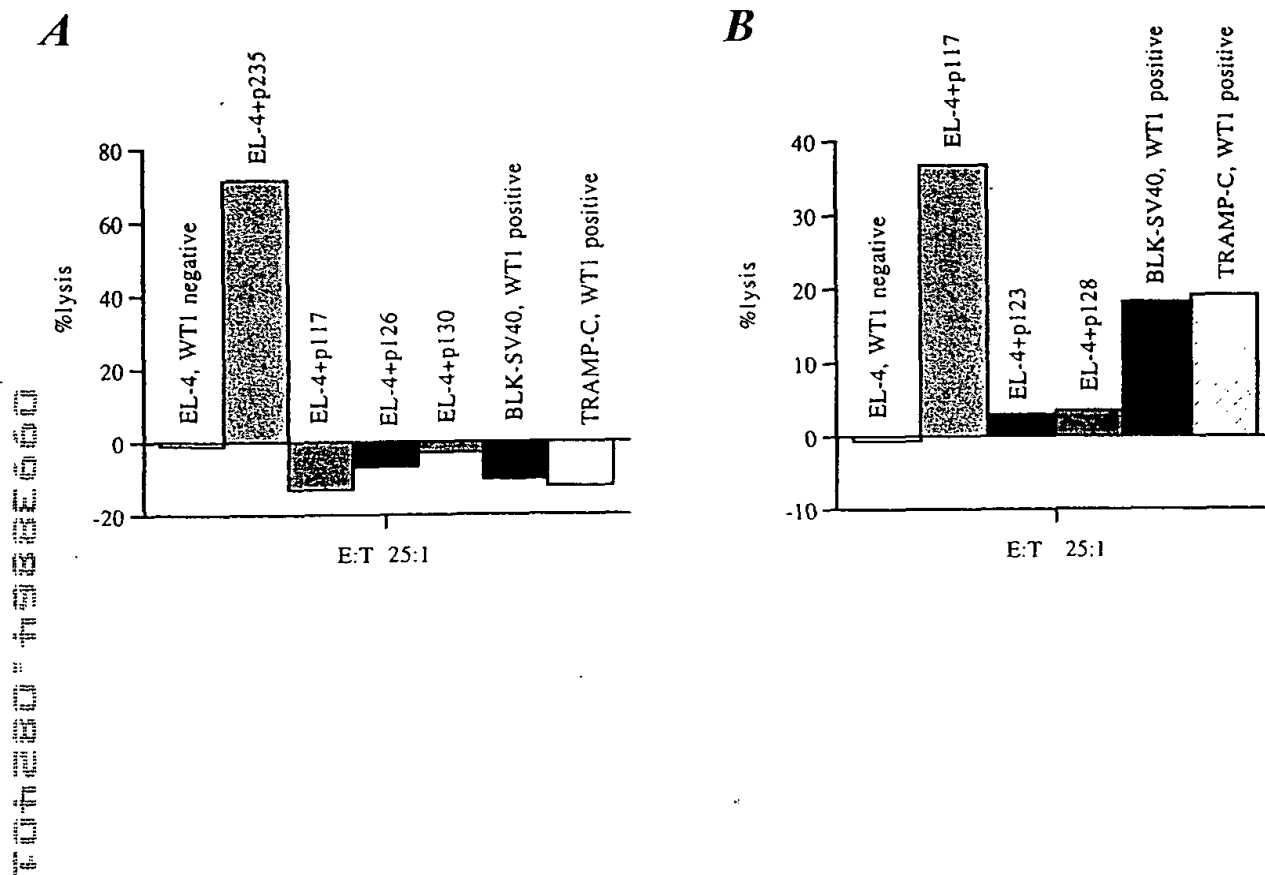


FIG. 11A and 11B

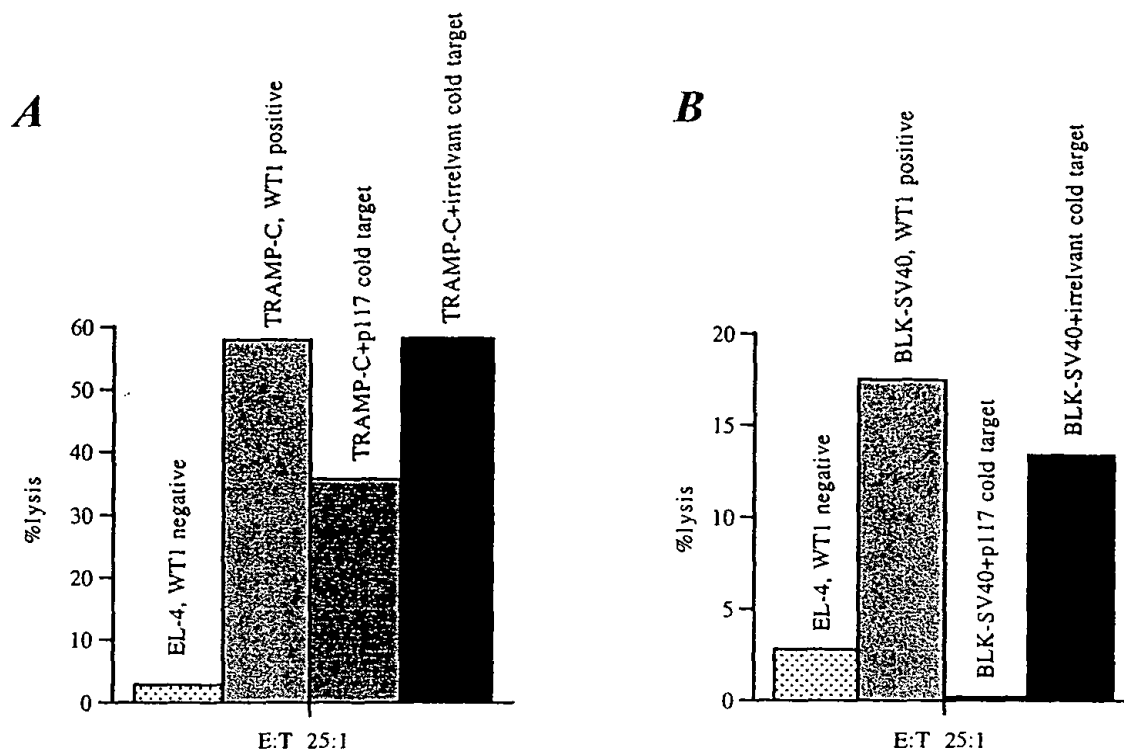
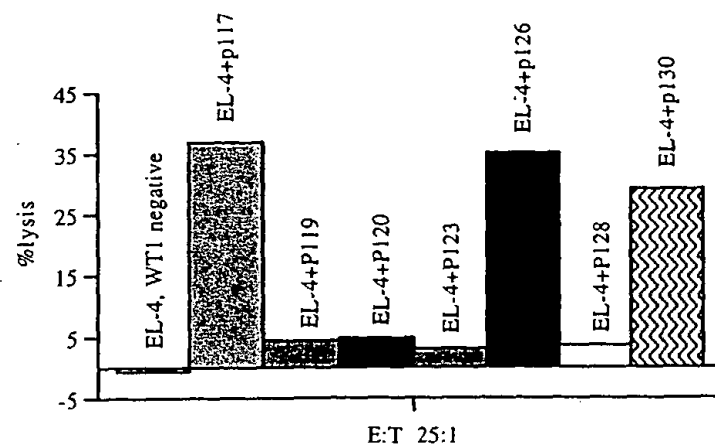
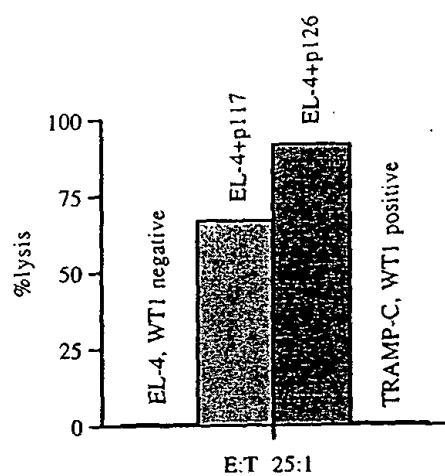


FIG. 12A and 12B

A



B



C

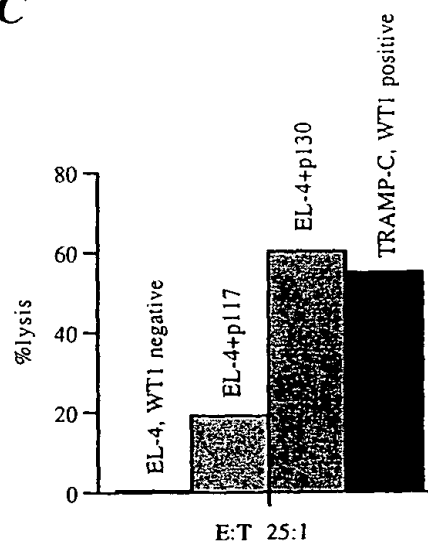


FIG. 13A-13C

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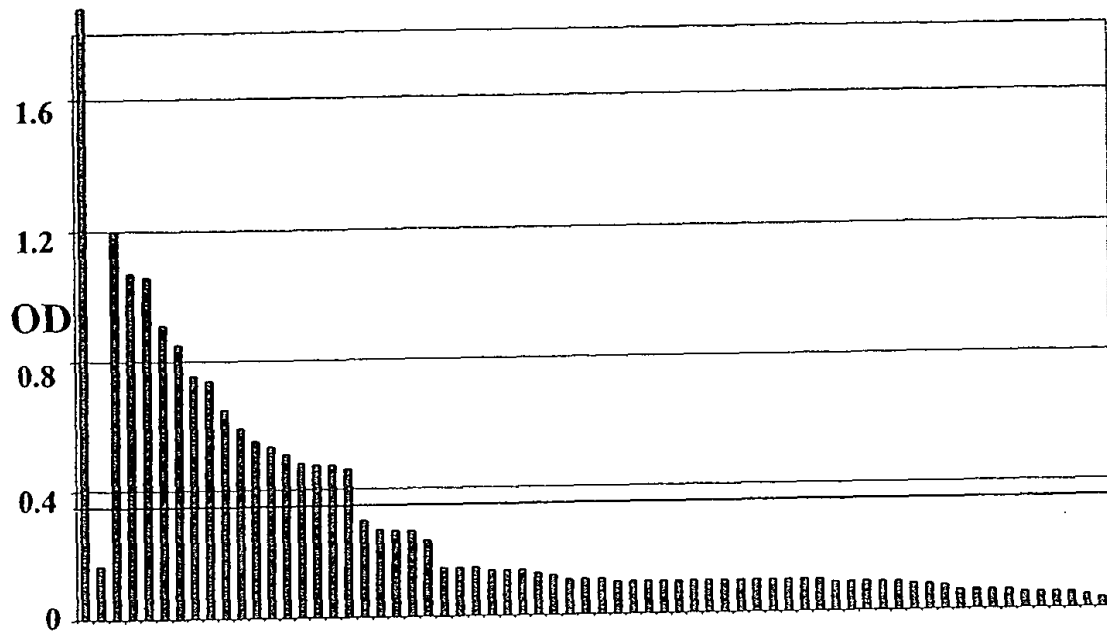


Fig. 14

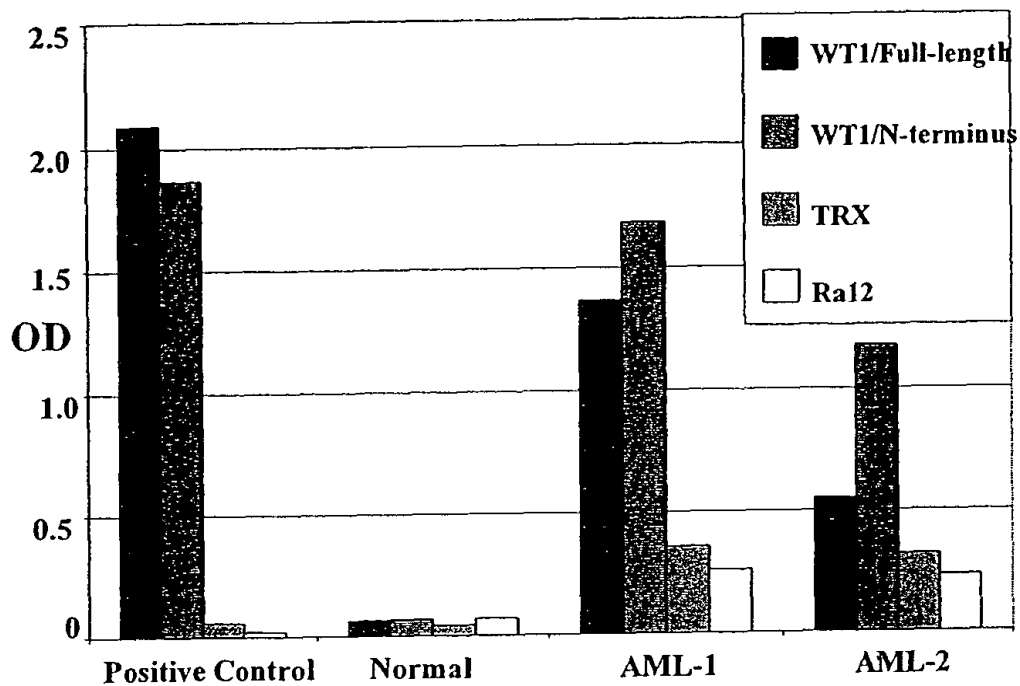


Fig. 15

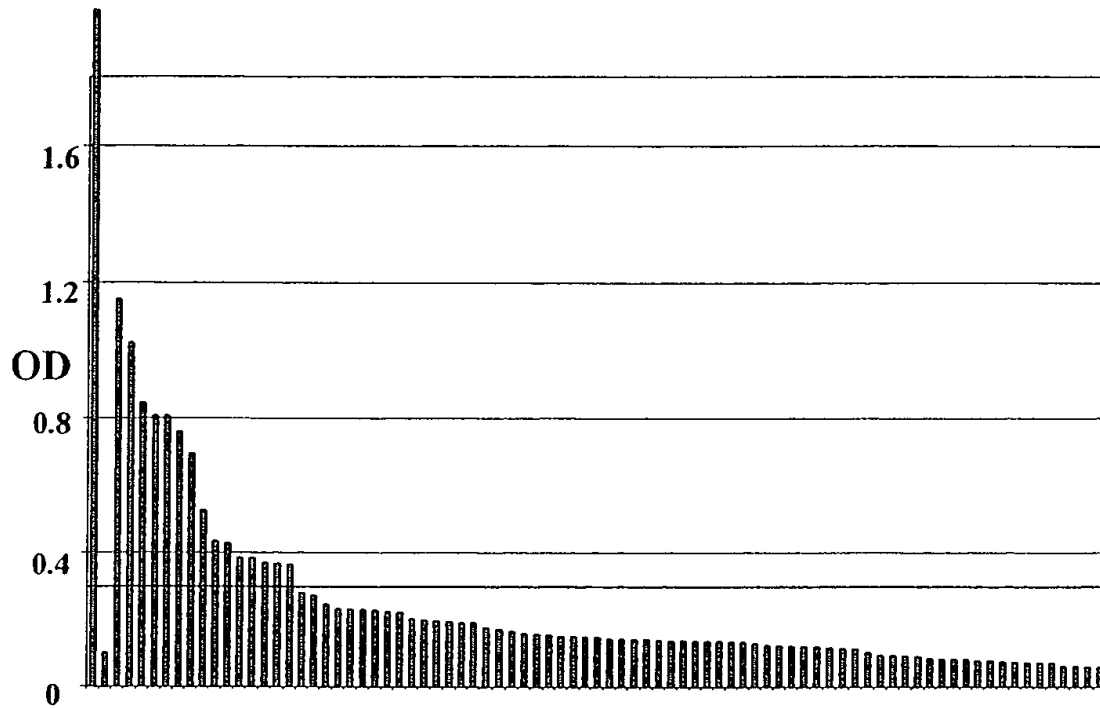


Fig. 16

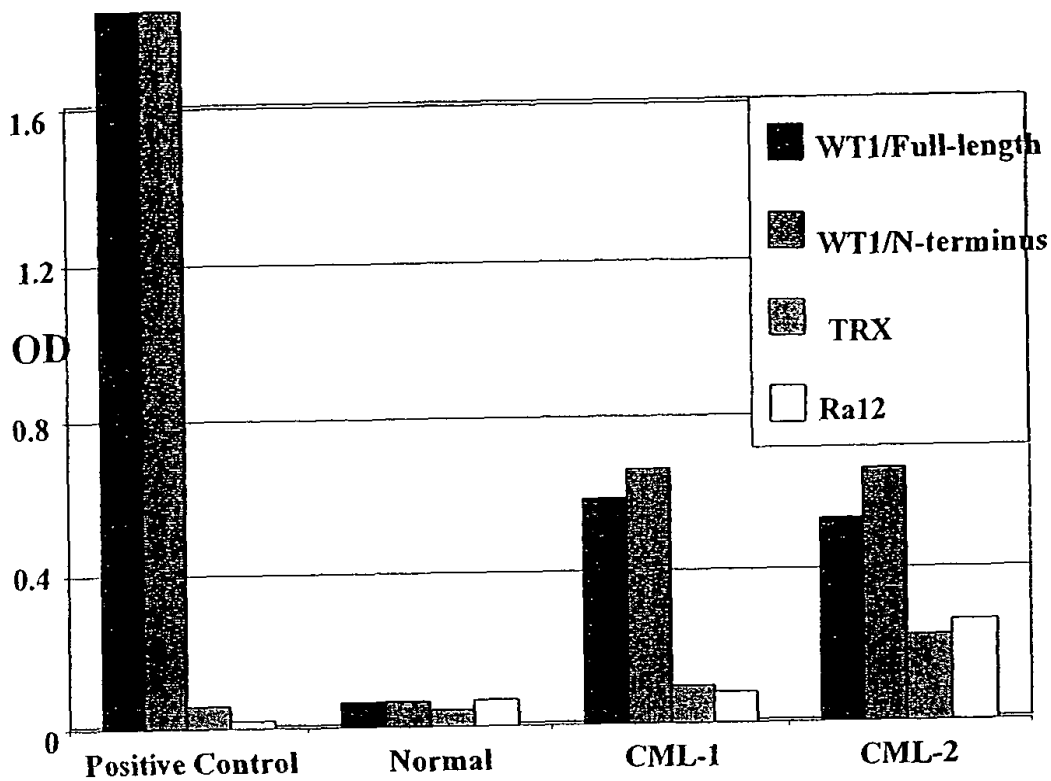


Fig. 17

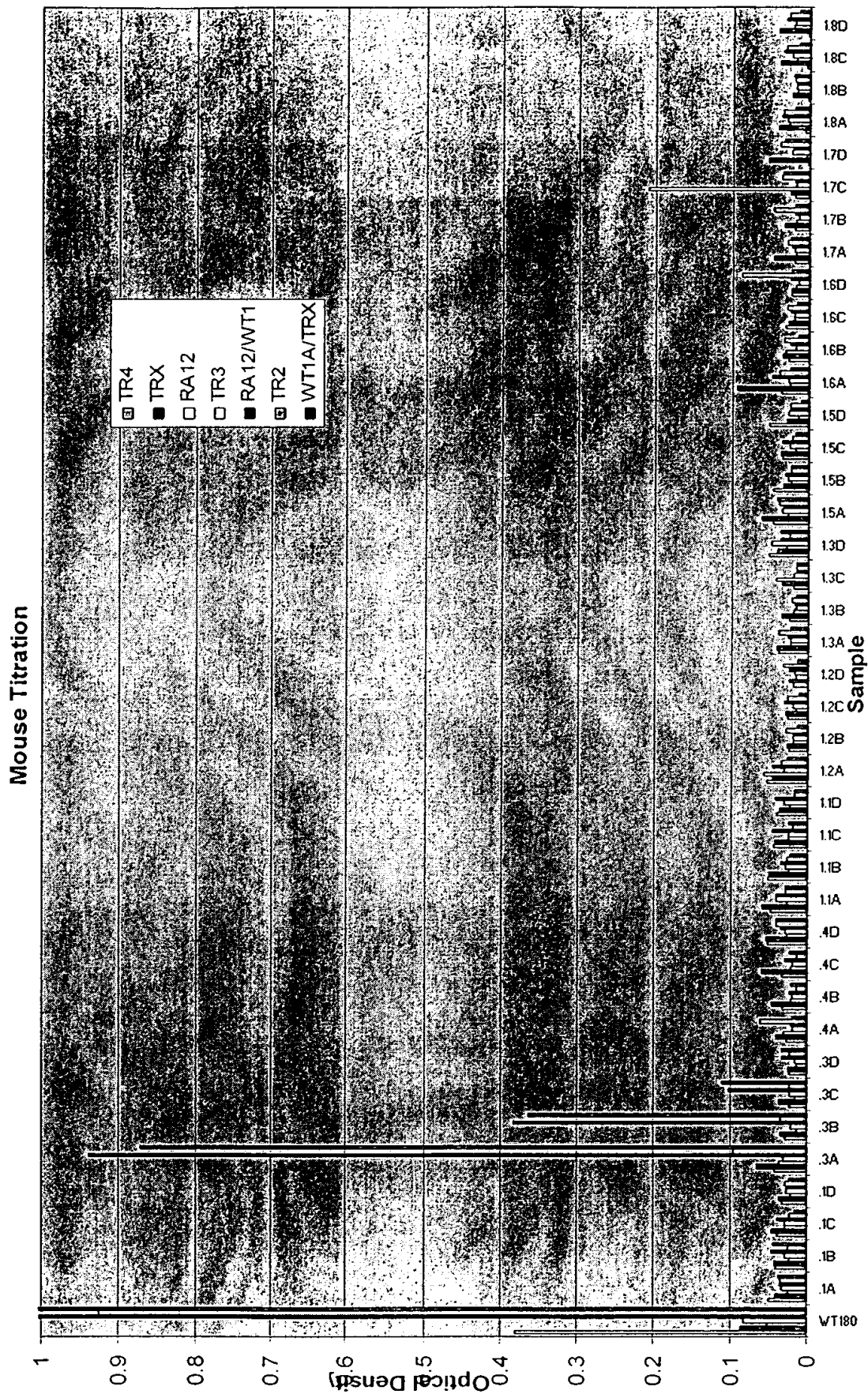
TABLE 1: Characteristics of Recombinant WT1 Proteins Used for Serological Analysis

TABLE 1: Characteristics of Recombinant WT1 Proteins Used for Serological Analysis

| <u>Name</u> | <u>Recombinant Protein</u> | <u>WT1 Amino Acid Position</u> | <u>Molecular Weight</u> |
|-----------------|-------------------------------------|--------------------------------|-------------------------|
| WT1/full-length | Ra12-WT1 full length fusion protein | aa 1-449 | 85kDa |
| WT1/N-terminus | TRX-WT1 N-terminus fusion protein | aa 1-249 | 60kDa |
| WT1/C-terminus | WT1 C-terminus protein | aa 267-449 | 50kDa |

Fig. 18

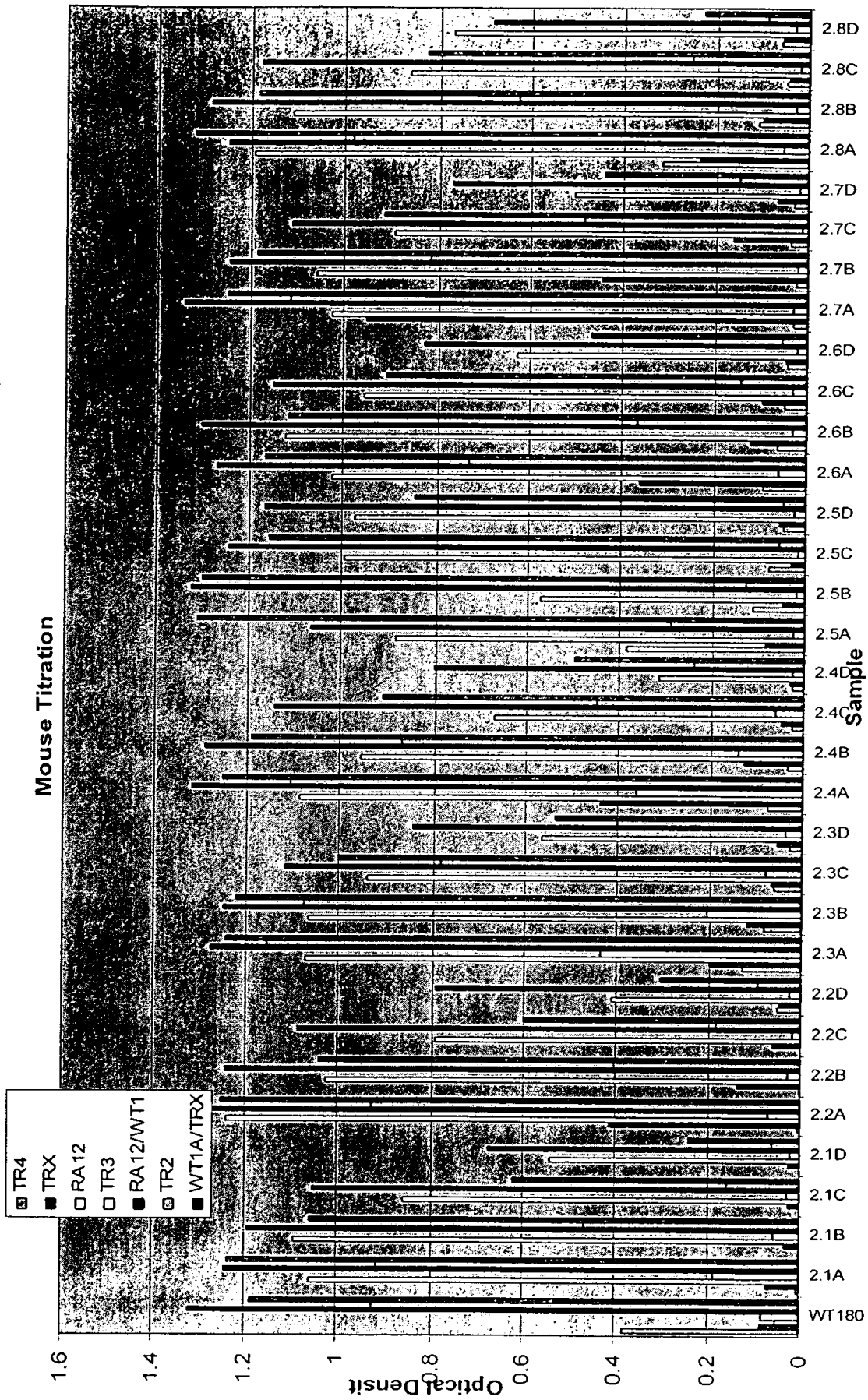
CID000622 Figure 1a Ab responses in group 0 and 1 (controls)



Control groups. A: 1:500 Dilution, B: 1:2000, C: 1: 8000, D: 1:16000

FIG. 19A

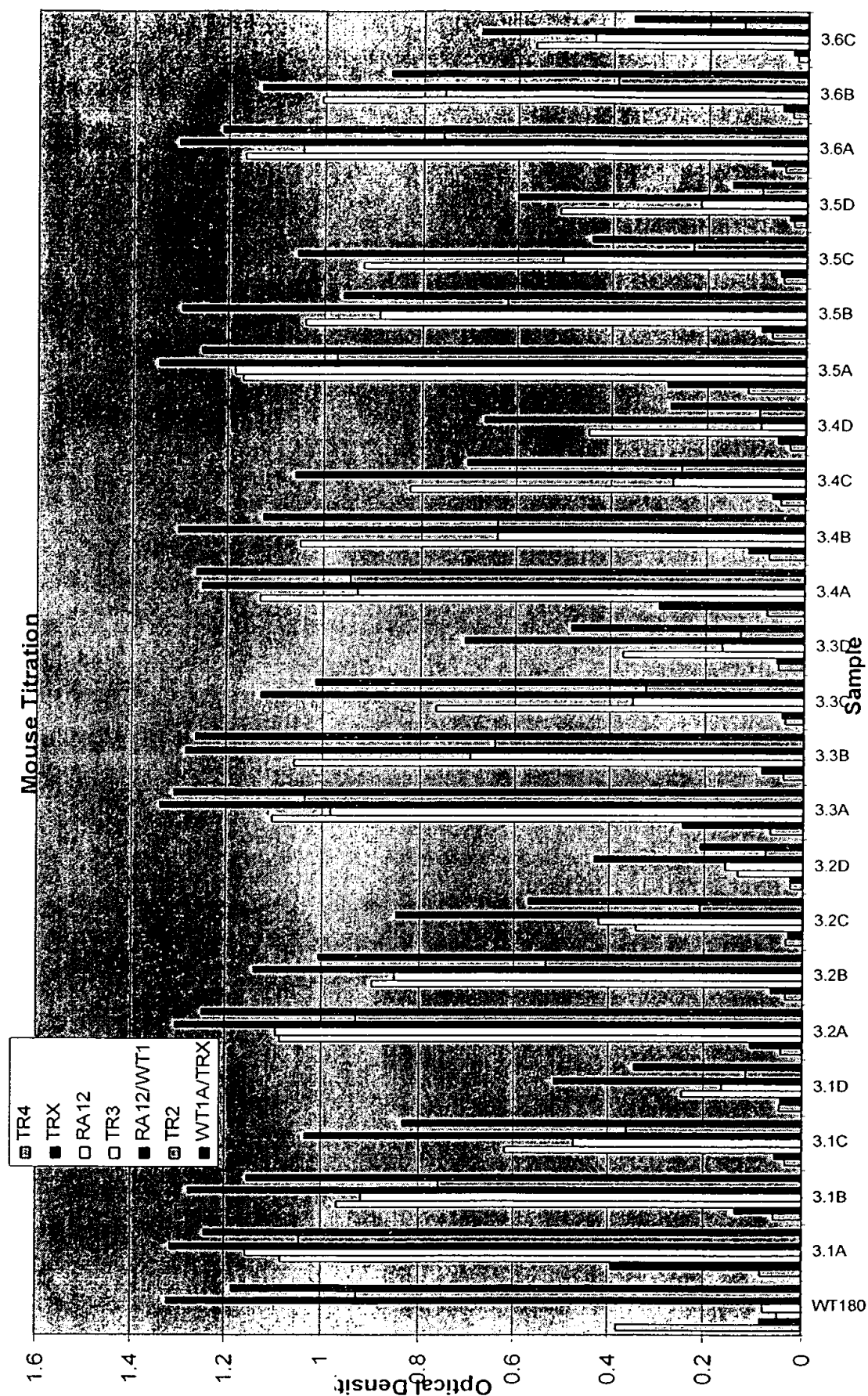
CID000622 Figure 1b. Ab responses in group 2 (25ug Ra12/WT1)



25ug Ra12/WT1+MPL-SE, A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

FIG. 19B

CID000622 Figure 1c. Ab responses in group 3 (100ug Ra12/WT1)



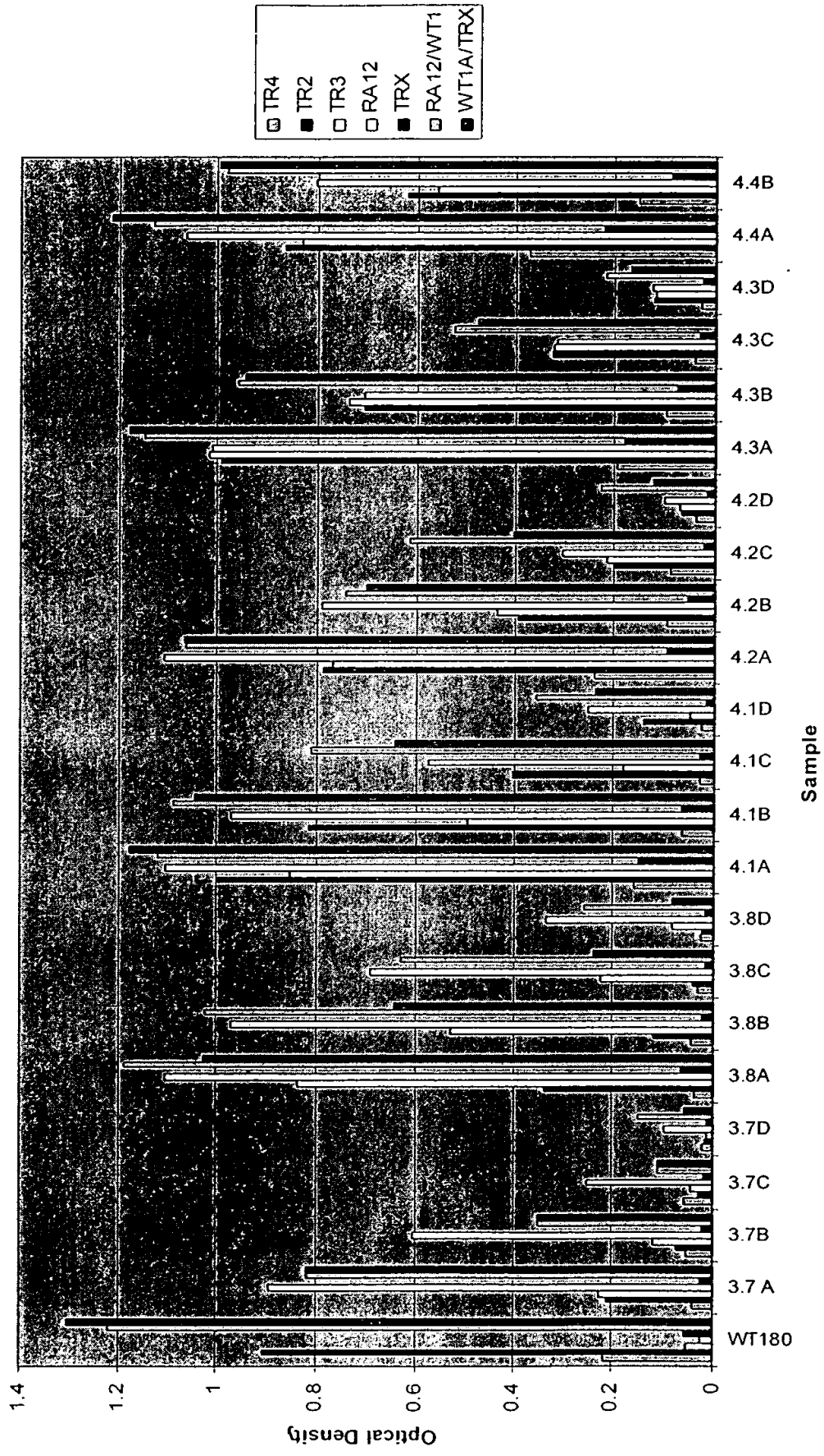
WT1. Dose Titration. Ab responses to WT1. 100ug Ra12-WT1+MPL-SE. A: 1;500 Dilution, B: 1:2000, C: 1: 8000, D: 1:16000

FIG. 19C

FIG. 19D

CID000622 Figure 1d. Ab responses in groups 3 and 4 (1000ug Ra12/WT1)

Mouse Titration

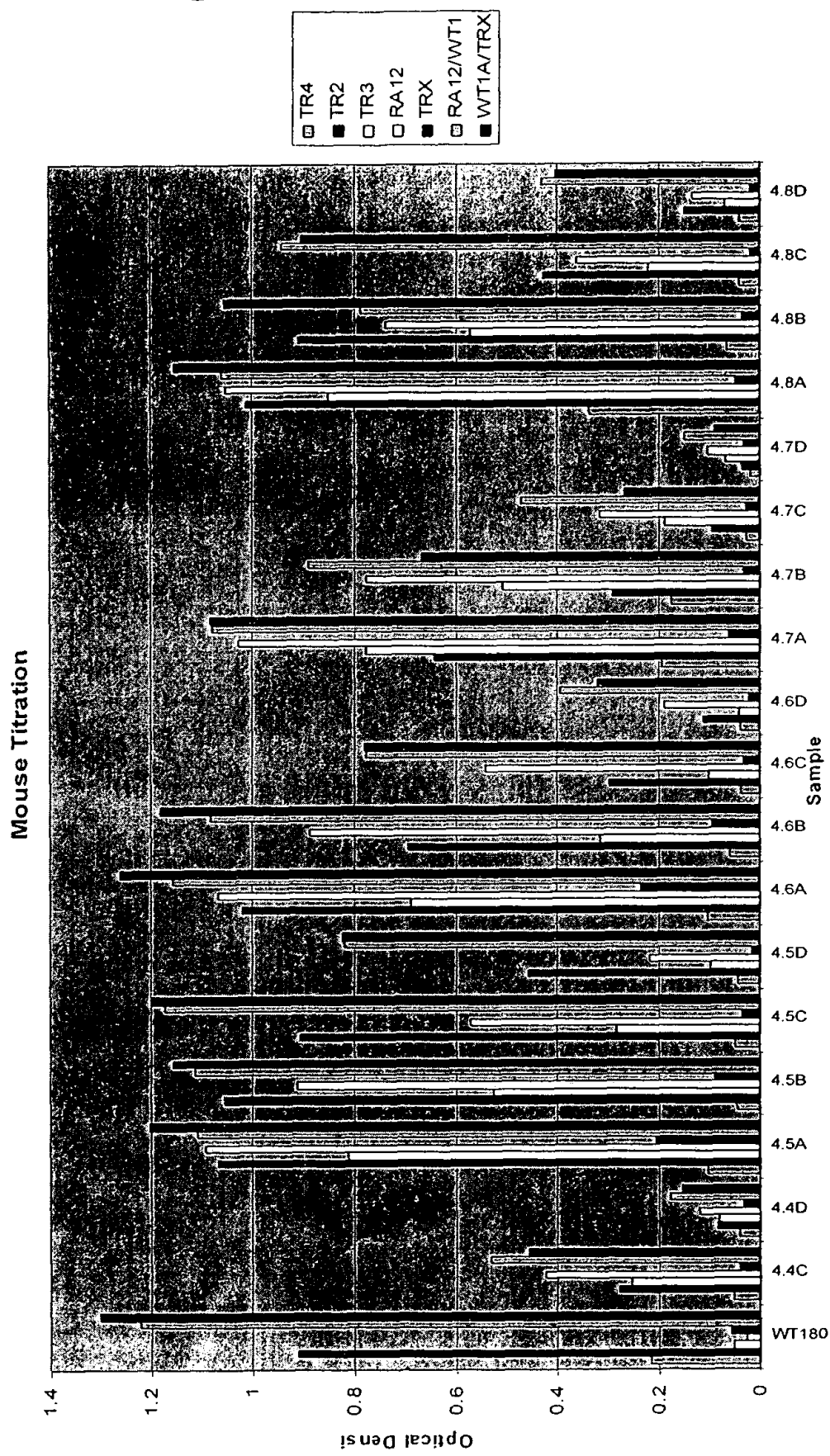


WT1. Dose Titration. Ab responses to WT1. 1000ug Ra12-WT1+MPL-SE. A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

FIG. 19D

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Figure 1e. Ab responses in group 4 (1000ug Ra12/WT1)



WT1. Dose Titration. Ab responses to WT1. 1000ug Ra12-WT1+MPL-SE. A: 1:500 Dilution, B: 1:2000, C: 1: 8000, D: 1:16000

FIG. 19E

Figure 2a. Proliferative T-cell responses in WT1 protein immunized mice.
 (Ra12WT1 dose titration, 3x in vivo, after 2IVS)

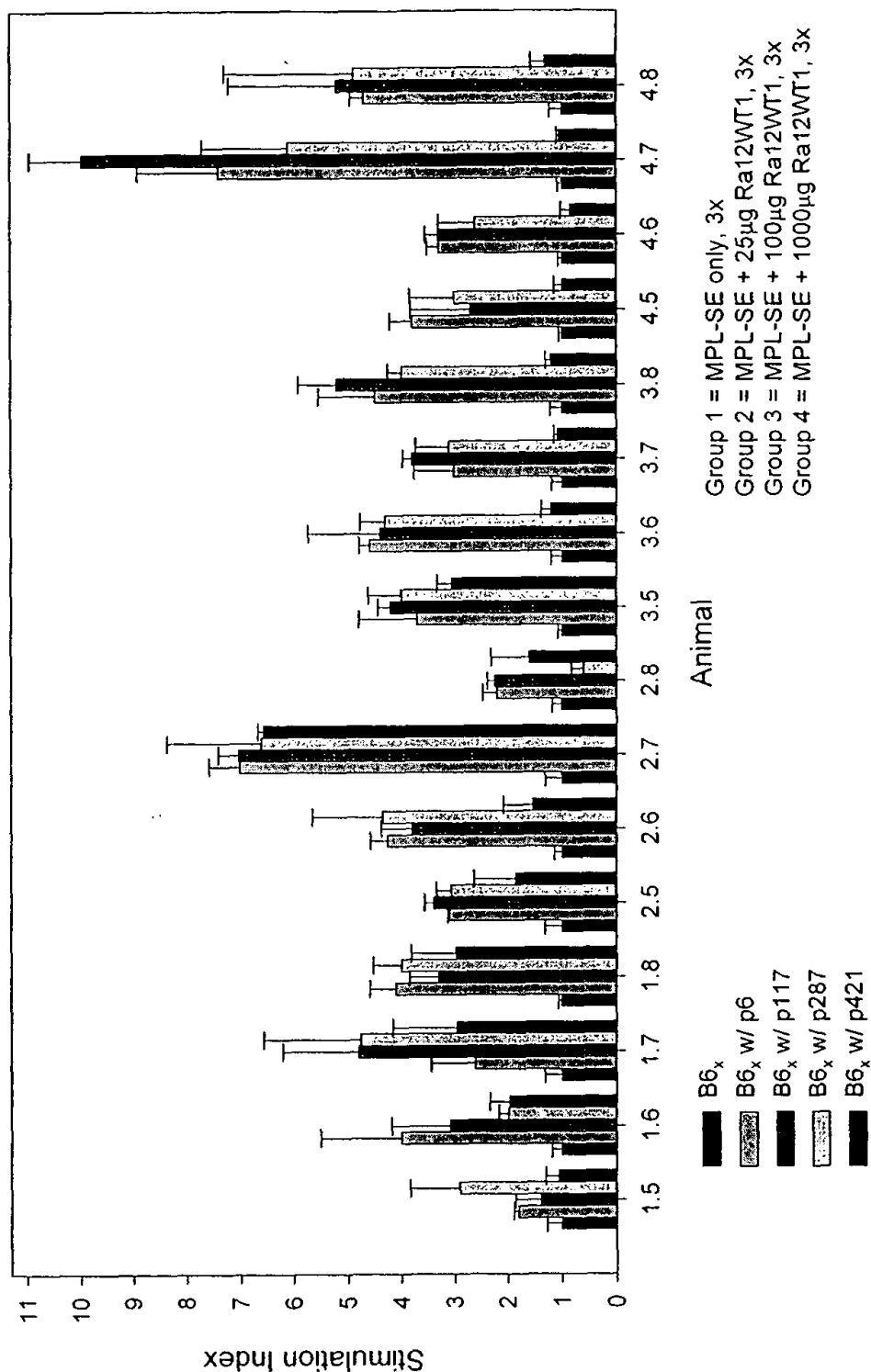


FIG. 20A

Figure 2b. Proliferative T-cell responses in WT1 protein immunized mice (Ra12WT1 dose titration, 6x in vivo, after 2IVS)

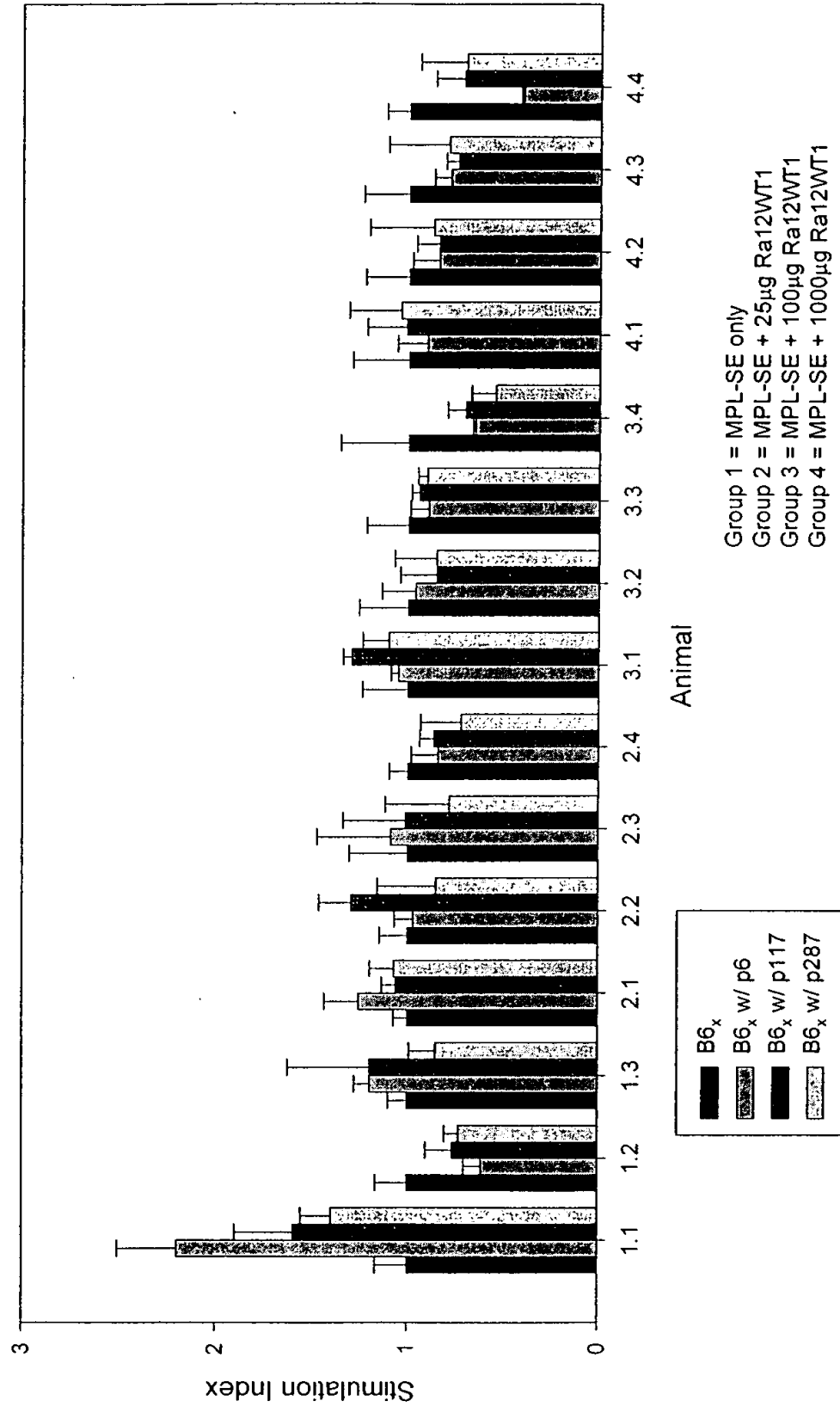


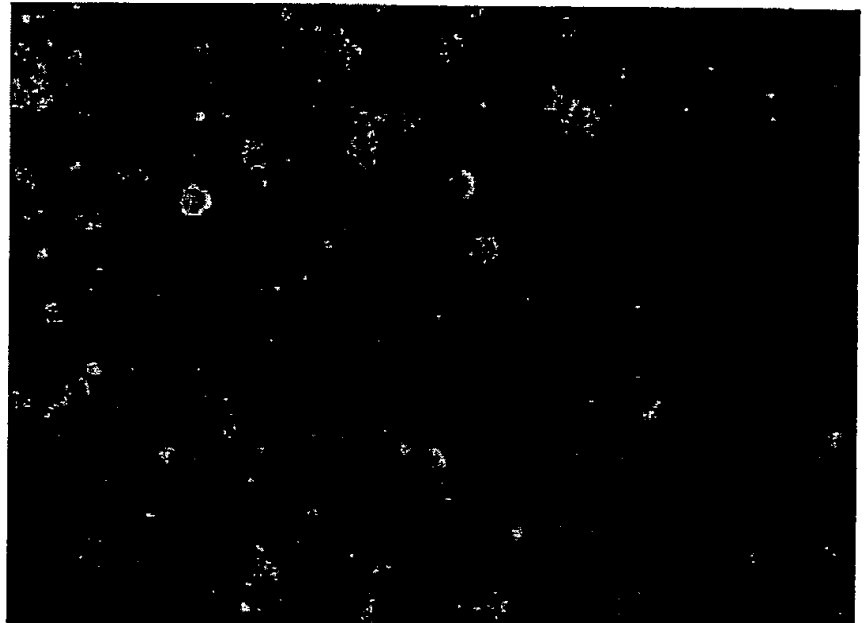
FIG. 20B

[illegible]

FIG. 22

Figure 2. WT1 can be expressed reproducibly in human DC following adeno WT1 infection and is not induced by a control Adeno infection

**Control
(Adeno EGFP
infected
human DC)**



**Adeno WT1
infected human
DC**

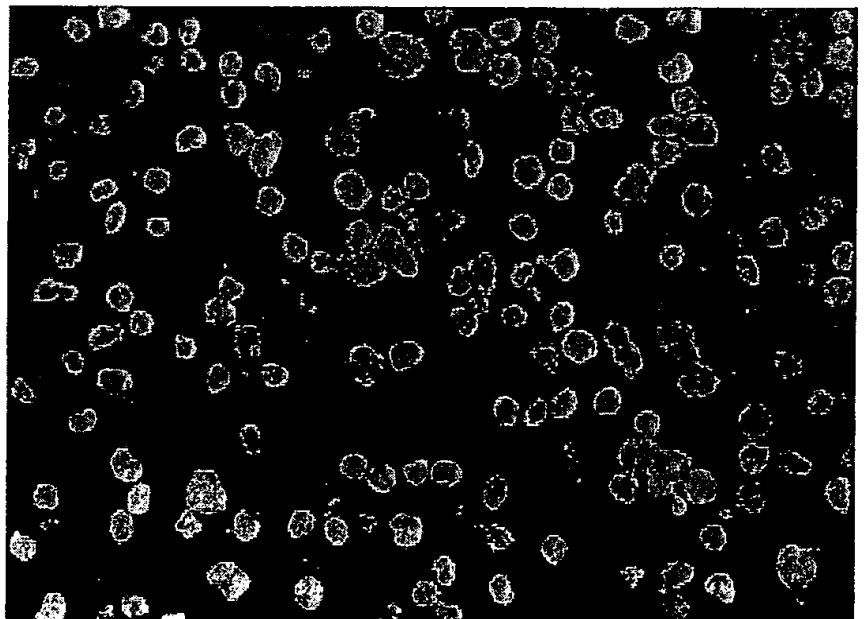


FIG. 22

FIG. 23

